

LOVELAND AREA PROJECTS Customer Brochure

PROPOSED FIRM ELECTRIC SERVICE RATE ADJUSTMENT

JUNE 2003

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SUMMARY

I. SUMMARY

<u>Firm Power:</u> Repayment analyses for Loveland Area Projects (LAP) indicate that the existing firm electric service rates do not meet repayment requirements. To fulfill those requirements, Western proposes the following increase in LAP firm electric service rates:

Class of Power	Existing	January 2004	Percent Change	
Revenue Requirement (million)	\$44.3	\$48.6	9.7%	
Firm Capacity (\$/kW-month)	\$2.85	\$3.14	10.2%	
Firm Energy (mills/kWh)	10.85	11.91	9.8%	
Composite Rate (mills/kWh)	21.70	23.81	9.7%	

The proposed rate adjustment is scheduled to become effective on an interim basis on the first day of the January 2004 billing period.

Although a one-step rate adjustment method is the option being proposed, Western is interested in receiving comments on a two-step rate adjustment option. Under a two-step method, the rates for LAP firm electric service will result in an overall composite rate increase of approximately 7.8 percent effective on January 1, 2004, and another 1.9 percent effective on October 1, 2004, for a total increase of approximately 9.7 percent. The rates under the two-step option for LAP firm electric service are as follows:

<u>Class of Power</u>	Existing	January 2004	Percent Change	October <u>2004</u>	Percent Change
Revenue Requirement (million)	\$44.3	\$47.7	7.7	\$48.6	1.9
Firm Capacity (\$/kW-month)	\$2.85	\$3.08	8.1	\$3.14	1.9
Firm Energy (mills/kWh)	10.85	11.69	7.7	11.92	2.0
Composite Rate (mills/kWh)	21.70	23.39	7.8	23.84	1.9

FIRM POWER RATE

II. LOVELAND AREA PROJECTS FIRM ELECTRIC SERVICE RATES

The current rates, \$2.85 per kilowattmonth (kWmo) and 10.85 mills per kilowatthour (mills/kWh) were placed in effect in the October 1994 billing period and approved by FERC on a final basis on July 14, 1994, under Federal Energy Regulatory Commission (FERC) Docket No. EF94-5181-000 (68 FERC 62,040). These rates were originally set to expire on January 31, 1999, but have been extended several times. The rates are currently set to expire on March 31, 2004.

A. Proposed LAP Firm Electric Service Rates: The LAP firm electric service rates were developed by combining the revenue requirements from the Preliminary Fiscal Year (FY) 2003 Power Repayment Study (PRS) (Rate Set PRS) for both the Pick-Sloan Missouri Basin Program (P-SMBP) Western Division (WD) (P-SMBP-WD) and the Fryingpan-Arkansas Project (Fry-Ark). The proposed rates are \$3.14 per kWmo for firm capacity and 11.91mills/kWh for energy, and are to be implemented in the first full billing period beginning on or after January 1, 2004.

1. Revenue Requirements:

a. Pick-Sloan Missouri Basin Program-Western Division: The present annual revenue requirement for P-SMBP-WD firm power is \$31,410,400, and is based on the current firm P-SMBP-WD composite rate of 15.80 mills/kWh and projected energy sales of 1,988 GWh.

PRESENT REVENUE REQUIREMENT:

15.80 mills/kWh x 1,988,000,000 kWh \$31,410,400

PROPOSED INCREASE (JANUARY 2004):

2.17 mills/kWh x 1,988,000,000 kWh

Revenue Requirement \$\frac{\\$4,313,960}{\\$35,724,360}\$\$ (17.97 mills/kWh x 1,988,000,000 kWh)

b. Fryingpan-Arkansas Project: The Fry-Ark Rate Set PRS indicates that the existing annual revenue requirement of \$12,855,560 meets all requirements for annual expenses and capital repayment. No increase is necessary.

PRESENT REVENUE REQUIREMENT:

\$12,855,560

PROPOSED INCREASE (JANUARY 2004):

Revenue Requirement \$\frac{\$0}{\$12,855,560}\$

 Total LAP Revenue Requirement: Revenue requirements for repayment of power obligations are:

\$35,724,360
\$12,855,560

Total LAP Revenue Requirement

\$48,579,920

 Rate Design: The proposed LAP firm electric service rate is designed to return 50 percent of the revenues from the capacity component and 50 percent from the energy component. The capacity component is based on a monthly billing of the seasonal Contract Rate of Delivery. The energy component is based on the annual contracted energy.

Capacity:

Energy:

- Supporting Data: Facts and figures in support of the proposed rate adjustment are summarized below.
 - Post 1989 Marketing Plan: The "Post-1989 General Power Marketing and Allocation Criteria" (Criteria) was published in the <u>Federal Register</u> on January 31, 1986 (51 FR 4012), and effectively integrated the operations,

resources, and contracts of the P-SMBP-WD and Fry-Ark. The integration of these projects, which are now known as LAP, increased marketable resources, simplified contract administration, and established a consolidated rate for LAP power sales. The Criteria also authorized the development of other services such as transmission service.

Although operationally and contractually integrated, P-SMBP-WD and Fry-Ark retain separate financial status. For this reason, separate PRSs are prepared annually for each project. These PRSs are used to determine the ability of the power rates to generate sufficient revenue to repay project investments and costs during each project's prescribed repayment period. To develop one rate for LAP firm electric service, the revenue requirements for Fry-Ark and P-SMBP-WD are combined.

Due to the integration of these two financially independent projects, procedures have also been established to distribute revenue to each project. Western splits LAP firm power revenue between the P-SMBP-WD and Fry-Ark on the basis of the proportional revenue requirements for each project. Consistent with past practice, "other revenues" are credited to the project earning the revenue. Most transmission revenue due to Western for the use of the LAP transmission system is credited to the P-SMBP and is included in the P-SMBP PRS. Fry-Ark receives credit for income related to third-party use of Western's transmission reservation on the system of the Public Service Company of Colorado. These revenues are included in the Fry-Ark PRS.

- 2. Hydrology Available Resources: The long-range annual contracted energy from the P-SMBP-WD is 1,988 GWh and the annual contracted energy from Fry-Ark is 52 GWh. The combined production of the two projects is 2,040 GWh. The energy and capacity marketed under the Criteria includes production resulting from flow-through energy from Fry-Ark, additional water from Windy Gap diversions, and various improvements in hydrologic estimates and unit capabilities across the P-SMBP-WD system.
 - a. P-SMBP-WD: The amount of capacity available and the amount of energy that can be produced by the Bureau of Reclamation (Reclamation) depend upon water conditions in the river basins encompassed by the P-SMBP-WD program and the Colorado-Big Thompson, Kendrick, Shoshone, and North Platte Projects, commonly known as the "Integrated Projects."

The Western Division reservoir storage was 60 percent of average to start FY 2002. Reservoir inflows were well below normal throughout the Western Division for the year: 43 percent of average for the Colorado-Big Thompson Project, 27 percent in the North Platte Basin, and 50 percent in the Bighorn Basin. The Adams Tunnel export of water from the Colorado

River Basin to the Big Thompson River Basin was 118 percent of average (268 thousand acre-feet). The resulting Western Division reservoir storage at fiscal year end was 53 percent of average.

During the last 10 years (1993-2002), water conditions in the P-SMBP-WD have ranged from very wet (1996) to very dry (2002). The median of the historical annual inflows to the Colorado-Big Thompson, North Platte, and Big Horn river basins is 4.13 million acre-feet. The highest inflow is 6.86 million acre-feet. The lowest is 1.79 million acre-feet.

However, these fluctuations do not affect the power under contact. In low water years, Western will purchase power to meet its obligations. In high water years, Western may offer surplus energy to its customers or sell the surplus on the open market.

- b. <u>Fry-Ark</u>: Since the Mount Elbert Powerplant is a pumped-storage powerplant, the plant's operation is relatively independent of regional hydrologic conditions. The Criteria specifies that the energy production capability of flow-through water is 52 GWh.
- 3. Power Repayment Studies: A PRS for the P-SMBP is prepared annually by Western with the cooperation of Reclamation and the Corps of Engineers (Corps.). Basic river basin hydrology, water depletions, power generation, and project development data and cost information are among the contributions made by Reclamation and the Corps. The annual Fry-Ark PRS is prepared by Western and coordinated with Reclamation for project development data and cost information. Power repayment studies are prepared in accordance with authorizing legislation and with Department of Energy (DOE) Order No. RA 6120.2 (Power Marketing Administration Financial Reporting).

The PRS summarizes historic income, expenses, and investment to be repaid from power revenues. They also estimate income, expenses, and investments for future years. The PRS shows the application of revenues as well as the annual repayment of power system production and transmission costs, and display other costs assigned to power for repayment. Total Federal investment remaining to be repaid over the repayment period or service life is also shown.

Revenues, expenses, and investments are entered into the PRS from historical data and from short-term, future budget estimates. These figures are then used to estimate long-term projections of revenues and expenses.

The purpose of a PRS is to determine the ability of power rates to generate sufficient revenue for repayment of project investments and costs during the project's repayment period. A PRS contains the following component parts:

a. Resources and Annual Revenues: In the PRS for P-SMBP, future available energy resources (based on the latest hydrology, depletions, and marketing projections) are multiplied by a composite energy yield to determine annual revenue estimates. In the PRS for Fry-Ark, flow-through energy is valued at the current LAP energy rate. The remaining revenue is attributed to capacity sales.

For the P-SMBP Rate Set PRS, future P-SMBP-WD annual firm energy sales are based on an annual energy amount of 1,988 GWh and capacity sales are based on actual LAP contract commitments (487.6 MW for summer season and 402.2 MW for winter season). For the Fry-Ark Rate Set PRS, capacity sales are based on marketing the available 200 MW of capacity and 52 GWh of flow-through energy. In addition, the PRS for each project also includes other revenues, such as economy energy, ancillary services, and transmission revenue.

The historical capacity and energy sales for both P-SMBP and Fry-Ark are through September 30, 2002.

- b. <u>Annual Revenue Deductions or Expenses</u>: Unless required payments are due, revenues are first applied to the repayment of annual expenses which, in the order of their priority for payment, include:
 - operation and maintenance (O&M) costs, purchased power, and transmission costs;
 - · yearly interest expenses on investments; and
 - · deficits.

These expenses are discussed below.

- (1) Annual Expenses: O&M expenses shown in each PRS reflect the costs associated with the operation of powerplants, substations, and transmission lines, as well as labor and supplies associated with maintenance. O&M expenses also reflect costs for nonrecurring maintenance and administrative overhead. The cost of purchased power and transmission required for firm contractual obligations are also included in annual expenses.
 - (a) Historical O&M expenses are based on accounting records through September 30, 2002. Projected O&M expenses are based on the FY 2005 budget documents.

- (b) Purchased power costs are projected in the Fry-Ark Rate Set PRS for 3 years. One year (2003) is based on drought conditions and 2 years (2004-2005) are based on an estimated need to purchase 20 percent of the LAP marketable energy at an average price of 40mills/kWh. Purchased power expenses, at an average price of 30mills/kWh, for P-SMBP-ED are based upon current reservoir levels and median inflows for FYs 2003-2008. Purchases are determined from the generation projections provided by the Corps of Engineers in that five-year period. Median inflows and generation are assumed in 2009 through the end of the study and purchases to support firm sales are zero. The Western Division included 1 year (2003) based on drought conditions and 2 years (2004-2005) based on an estimated need to purchase 20 percent of the LAP marketable energy at an average price of 40mills/kWh.
- (c) Transmission expenses are included in the Fry-Ark Rate Set PRS through 2013; assuming an estimated timeframe to either participate in a Regional Transmission Organization (RTO) or negotiate another transmission contract. Transmission expenses are included in the P-SMBP PRS for the full 100 years.
- (2) Interest Expenses: The yearly interest expenses are paid next. Historical interest expenses in each PRS are based on accounting records through September 30, 2002. Projected interest expenses reflect the various interest rates applicable to the unpaid balances of outstanding investments.

The interest rates in the P-SMBP PRS vary from 0 to 12.375 percent. The interest rates in the Fry-Ark PRS vary from 3.046 to 8.542 percent.

- (3) <u>Deficits</u>: Project deficits (expenses exceeding revenues), or a portion thereof, are paid after yearly annual expenses and interest expenses have been paid. These deficits are capitalized at current interest rates and classified into two categories:
 - (a) Category 1 A deferred annual cost deficit
 - (b) Category 2 A deferred interest expense deficit

P-SMBP expenses exceeded revenues by \$46.5 million in FY 2002. Primarily drought related, the deficits resulted from increased purchased power expenditures and decreased revenue from surplus sales. This resulted in a "Category 2" deficit.

No deficits were incurred by Fry-Ark in FY 2002. A surplus of \$99,000 was applied as a full payment of a 2001 "Category 2" deficit.

- c. <u>Investment Repayment</u>: Annual expenses (including interest and deficit payments) are subtracted from annual revenues to arrive at net revenue available for repayment. These revenues are applied to repayment of the highest interest-bearing investment first. The investment can be one of the following:
 - (1) Replacements: Replacements are defined as features or equipment that need to be replaced to ensure project performance. Replacements carry current interest rates, and are required to be repaid within each unit's estimated service life (not to exceed 50 years). The total electric plant investment for a project is used in computing the estimated future replacement costs for the project.

The historical replacements in the Rate Set PRSs are based on accounting records through September 30, 2002. Replacements within the 5-year budget period (2004-2008) are based on the FY 2005 budget documents. Beyond the budget period, each PRS estimates replacements by units of property and service life factors based on data from "Replacements Units, Service Lives, and Factors" published by Reclamation and Western in May 1989, and updated in July 1995.

- (2) Additions: A project feature or facility that is not included in the original authorizing legislation is considered to be an Addition.
- (3) <u>Project Investments</u>: Project investments are the original Federal investments authorized by legislation. The interest rate which applies to these investments is defined as the project interest rate. Portions of the project's multipurpose features which are allocated to power are included in project investments.

The project interest rate in the P-SMBP PRS is 2.5 percent. The project interest rate in the Fry-Ark PRS is 3.046 percent.

(4) <u>Irrigation Assistance</u>: Generally, power users are required to pay irrigation investment that is beyond the irrigators' ability to repay. Interest is not accrued on irrigation investments. P-SMBP currently includes irrigation investments in the PRS; Fry-Ark does not have any irrigation assistance assigned to power at this time.

Investments are repaid on the basis of the highest interest-bearing investment being paid first. Since additions and replacements generally carry higher interest rates than project investments, they will normally be repaid first. However, if the repayment period of a low interest-bearing investment is about to expire, the low interest investment may take repayment precedence.

APPENDIX A

RATE ADJUSTMENT PROCEDURES

Western's rate adjustment procedures are governed by the "Procedures for Public Participation in Power and Transmission Rate Adjustments and Extensions" (10 CFR Part 903). These procedures give interested parties an opportunity to participate in the development of power rates.

- I. Notice of Proposed Rate and Consultation and Comment Period: Initially, a notice of the Proposed Rate and official time for public participation must be published in the Federal Register. This notice is referred to as the Proposed Rates for Loveland Area Projects Firm Electric Service, and establishes a consultation and comment period. This period begins on the publication date of the Federal Register notice and closes not less than 90 days later. During this period, interested parties may consult with and obtain information from Western's representatives. They may also examine data used in the power repayment studies and suggest changes. Specific details for providing comments are included in the Federal Register notice.
 - A. <u>Public Information Forum</u>: Western's representatives explain the Proposed Rate changes and answer questions. Those questions not answered at the information forum receive written responses at least 15 days prior to the end of the consultation and comment period.
 - B. <u>Public Comment Forum</u>: This forum provides a formal opportunity for interested parties to submit either written or oral comments to be shared with other attendees and Western representatives. Usually, Western does not respond to comments at this forum. However, comments are considered in developing the final rate.
 - C. Written Comments: Interested parties may submit written comments and inquiries to Western during the consultation and comment period.
 - D. Revision of Proposed Rate: After the close of the consultation and comment period, Western will review and consider comments. If appropriate, the Proposed Rate will be revised. If the Administrator determines that further public comment should be invited or is necessary, interested parties will be given a period of at least 30 days to submit additional comments concerning the Proposed Rate.
 - E. Preliminary Decision on Interim Rate: Following the end of the consultation and comment period, the Administrator will develop provisional rates. The Deputy Secretary of Energy for the Department of Energy (DOE) has the authority to confirm, approve, and place this rate into effect on an interim basis. The decision, together with an explanation of the principal factors leading to the decision, will be published in the Federal Register.

- F. Final Approval of Interim Rate: The Deputy Secretary will submit information concerning the interim rate to the Federal Energy Regulatory Commission (FERC) and request final approval. The response of FERC will be to:
 - 1. give final confirmation and approval to the interim rate,
 - 2. disapprove the interim rate, or
 - 3. remand the matter to Western for further study.

The interim rate does not become final until it is approved by FERC.

APPENDIX B

ENVIRONMENTAL EVALUATION

Western will conduct an environmental evaluation of the proposed rates and develop the appropriate level of environmental documentation pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et. seq.); the Council on Environmental Quality Regulations of implementing NEPA (40 CFR Parts 1500 thorough 1508); and the DOE NEPA Implementing Procedures and Guidelines (10 CFR Part 1021).

APPENDIX C

PROPOSED SCHEDULE

- Informal Customer Meetings took place on April 14-15, 2003
- Public Process
 - FRN Published (mid-June)
 - 90 Day Comment Period (closes 90 days after FRN published)
 - · Information Forums
 - July 14, 2003, at 1 p.m. MDT Radisson Stapleton Plaza 3333 Quebec Street Denver, CO
 - July 15, 2003, at 9 a.m. CDT Southeast Community College (1st Floor of the Energy Plaza) 11th and O Street Lincoln, NE
 - Comment Forum
 - August 6, 2003, at 1 p.m. MDT Radisson Stapleton Plaza 3333 Quebec Street Denver, CO
- Address Comments
- · Record of Decision (mid-November)
- Rate Announcement (December)
- Implement Rate January 1, 2004

APPENDIX D

PROJECT DESCRIPTIONS

Pick-Sloan Missouri Basin Program-Western Division

The initial stages of the Missouri River Basin Project were authorized by section 9 of the Flood Control Act of December 22, 1944 (58 Stat. 877, Public Law 534, 78th Congress, 2nd session). The Missouri River Basin Project has been under construction since 1944. It was later renamed the Pick-Sloan Missouri Basin Program to honor its two principal authors. The P-SMBP encompasses a comprehensive program, with the following authorized functions: flood control, navigation improvement, irrigation, municipal and industrial water development, and hydroelectric production for the entire Missouri River Basin. Multipurpose projects have been developed on the Missouri river and its tributaries in Colorado, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.

The Colorado-Big Thompson (C-BT), Kendrick, and Shoshone projects were administratively combined with P-SMBP in 1954, followed by the North Platte Project in 1959. These projects are known as the "Integrated Projects" of the P-SMBP. The Riverton Project was reauthorized as a unit of P-SMBP in 1970.

Western Division generating resources include five units of the P-SMBP and four other Bureau of Reclamation projects authorized before P-SMBP, but that are integrated with P-SMBP for repayment purposes. The Boysen, Glendo, Kortes, Riverton, and Yellowtail P-SMBP units include the Boysen, Glendo, Fremont Canyon, Kortes, Pilot Butte, and Yellowtail powerplants. The Colorado-Big Thompson, Kendrick, North Platte, and Shoshone projects include the Green Mountain, Marys Lake, Estes, Pole Hill, Flatiron, Big Thompson, Seminoe, Alcova, Guernsey, Shoshone, Buffalo Bill, Heart Mountain, and Spirit Mountain powerplants. The Bureau of Reclamation operates and maintains all Western Division powerplants. The Western Division's powerplants' combined installed capability is 658 MW.

Fryingpan-Arkansas Project

Fry-Ark is a transmountain diversion project in central and southeastern Colorado which was authorized by the Act of August 16, 1962, (Public Law 87-590, 76 Stat. 399, as amended by Title XI of the Act of October 27, 1974, Public Law 93-493, 88 Stat. 1487). Fry-Ark diverts water from the Fryingpan River and other tributaries of the Roaring Fork River to the Arkansas River on the East Slope of the Continental Divide. The Fryingpan and Roaring Fork Rivers are part of the Colorado River Basin, on the West Slope of the Rocky Mountains. The water diverted from the West Slope, together with regulated Arkansas River water, provides supplemental irrigation, municipal and industrial water supplies and hydroelectric power production. Flood control, fish and wildlife enhancement, and recreation are also supported by these water diversions.

The project has six dams and five reservoirs with a total storage of 741,000 acre-feet of water, 70 miles of tunnels and canals and a pumped-storage powerplant at Mount Elbert. Its two generating units have an installed capacity of 206 MW. While the

majority of project capacity depends on water pumped during off-peak hours and water releases for power production when needed, some generation is attributed to flow-through water. Authorization for the first 100 MW unit of the powerplant was granted on August 16, 1962. The second unit was authorized on October 27, 1974. Work on these two units was completed in 1984.

The pumped-storage capability of the Mount Elbert power plant has become increasingly valuable to Western and its customers. With high prices for power during peak periods, customers have been maximizing their use of the pumped-storage capability under their contracts by taking delivery during the day (on-peak) and returning energy at night (off-peak) to pump water back into the forebay at the powerplant.

See Exhibit 1 Link on website

See Exhibit 2 Link on website

See Exhibit 3 Link on website

UNITED STATES DEPARTMENT OF ENERGY WESTERN AREA POWER ADMINISTRATION

LOVELAND AREA PROJECTS COLORADO, KANSAS, NEBRASKA, WYOMING

SCHEDULE OF RATES FOR FIRM ELECTRIC SERVICE

Effective:

On the first day of the first full billing period on or after January 1, 2004, through December 31, 2008.

Available:

Within the marketing area served by the Loveland Area Projects.

Applicable:

To the wholesale power customers for firm power service supplied through one meter at one point of delivery, or as otherwise established by contract.

Character:

Alternating current, 60-hertz, three-phase, delivered and metered at the voltages and points established by contract.

Monthly Rate:

DEMAND CHARGE: \$3.14 per kilowatt (kW) of billing demand.

ENERGY CHARGE: 11.91 mills per kilowatthour (kWh) of use.

BILLING DEMAND: Unless specified by contract, the billing demand will be the seasonal contract rate of delivery.

Adjustments:

For Transformer Losses:

If delivery is made at transmission voltage but metered on the low-voltage side of the substation, the meter readings will be increased to compensate for transformer losses as provided for in the contract.

For Power Factor:

The customer will be required to maintain a power factor at all points of measurement between 95-percent lagging and 95-percent leading.